

SCHEMATIC REPRESENTATION FOR EPITOPE EVOLUTION

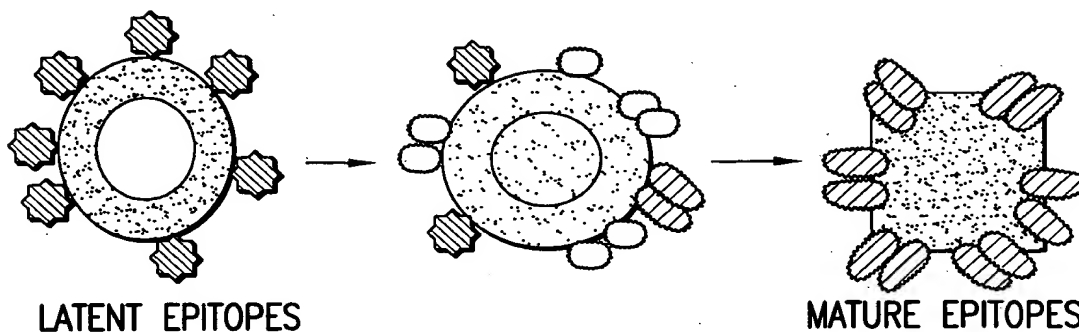


FIG.1A

CHEMICAL CONVERSION - INTERCHAIN DISULFIDE BOND CROSS-LINKING

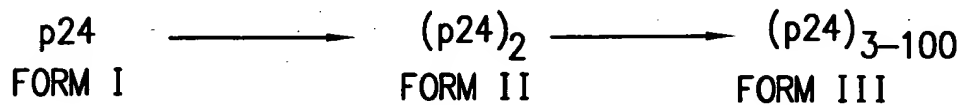


FIG.1B

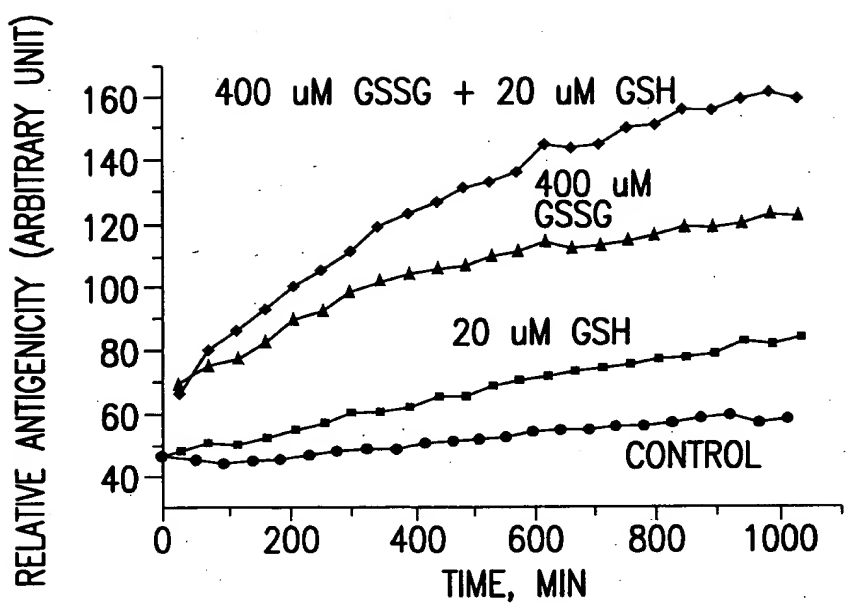


FIG.2A

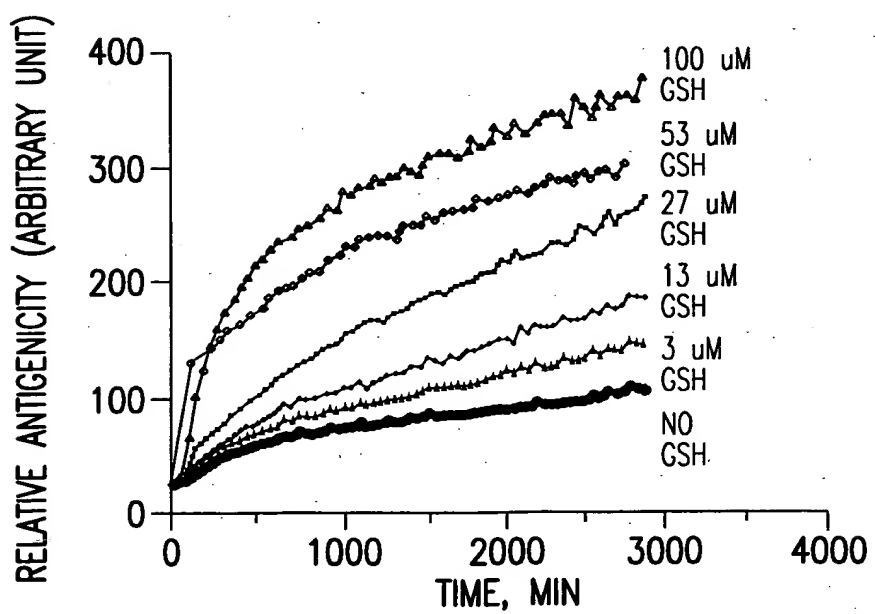


FIG.2B



AT: 2 CACATTGCTGACCCAGTCTCCAGGCAATCATGTCTGCATCTCCAGGGGAGAGGTGACCATGACCTGCCAGTCCGAGCTCAAGTGAAGTTACATGTAC**TGGTACGAGGAGACAGCCAGGATCCTCCCGCAGACTCCTCGATTTTTCACACATCCAGCCTGCCCTTCGGAGTCCCTGTT
 CDR 1 70 80 90 100 110 120 130 140 150 160 170 180
 CDR 2 50 60
 1 DIVLTQSPAIMSSASPGCEKVTIMTCSASSSVSYMY*WYQQQKPGSSSPRLLIFIDTSNLPSCVPV

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CDR 3

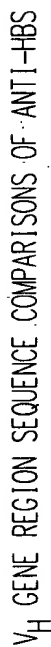
190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350

Jk

A1.2 CCGCTCAGTGGCAGTGGGCTTGGGAGCTCTTACTCTCTCAGCAATCAGCCGATGGAGGCTGACAGATGCTGCCACTTATTACTGCCAGCGGTGGAGTACTTACCCACCCATCAGCTTGGAGGGGGGACCAAACTGCGAAATAAAGGGCTGATGCTGCAGCCACTGCTATCCATC

A1.2 R F S G S G T S Y S L T I S R M E A E D A A T Y Y C Q R W S T Y P P I T F C G C T K L E I K R A D A A P T V S I

FIG. 3A



CDR 1

CDR 2

1 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180

A1.2 GAATGCAATCTTCAGGAGTCGGGACCTGAGCTGGTCAGACCCTCGGGCTTCACTCGANGAATATCCTCGAGGCTTCGGCTACTCCTTCATATGACCACTATAAATCTGGGTGAGCCACAGAGCCTCGACAGGAGACTTCAGTCGATTCGATGCTTTTTCCTCGACAGCCGTAATAGTAGAGTAC

	1	10	20	30	40	50	52a	55
AI.2	D V H L Q E S G P E L V K P C A S V K I S C K A S G Y S F I D H Y I N W V K Q K P C Q G L E W I G C F F P G S C N S K Y							

A1.2

190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360

ATTGAGAACTTCAGGGGCAAGGCCACATTGACGTGACACACATCCTCCAGTACAGCTACAGCTACAGCCCTGACATCTCAGGACACATCGCTGCTATTTCGTCGCAAGGCATGATTCCGACCCGAAAAAAAAAGCTATGGACTACTGGGTCAGGGAACCTCAGTCACC

Diagram illustrating a DNA sequence alignment. The sequence is shown in two rows, with positions 190 to 360 indicated above. The top row contains the sequence: ATTGAGAACTTCAGGGGCAAGGCCACATTGACGTGACACACATCCTCCAGTACAGCTACAGCTACAGCCCTGACATCTCAGGACACATCGCTGCTATTTCGTCGCAAGGCATGATTCCGACCCGAAAAAAAAAGCTATGGACTACTGGGTCAGGGAACCTCAGTCACC. The bottom row contains the sequence: COR 3. A bracket labeled 'D' spans from position 300 to 320. A bracket labeled 'JH' spans from position 330 to 360.

	60	70	80	90	100	110	119
A1.2	I E N F R G K A T L T V D T S S S T A Y M Q L S S L T S E D T A V Y F C A R D D S D C * * * * A M D Y W C Q C T S V T						

FIG. 3B



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DAY 1 PRE-TREAT STANDARD AND SAMPLES - SECTION III.A.

DISPENSE 200 mcL OF EACH TREATED STANDARD
OR SAMPLE DILUTION INTO WELLS

↓
DISPENSE 200 mcL OF THE DILUENT CONTROL AND
THE KIT CONTROLS INTO REPLICATE WELLS

↓
ADD 50 mcL OF CONJUGATE TO WELLS

↓
TAP TRAY GENTLY TO MIX

↓
ADD ONE BEAD TO EACH TEST WELL

↓
INCUBATE TRAYS FOR 12-20 HOURS AT 20-28°C

↓
DAY 2 WASH BEADS 1 CYCLE WITH 14 ± 3 mL DISTILLED WATER

↓
TRANSFER BEADS TO TUBES

↓
ADD 300 mcL OF OPD SUBSTRATE SOLUTION

↓
INCUBATE 30 TO 35 MINUTES AT 20-28°C IN THE DARK

↓
ADD 1 mL OF 1N SULFURIC ACID TO EACH TUBE

↓
READ TUBES IN QUANTUMATIC™ WITHIN 2 HOURS

↓
-READ KIT CONTROLS BLANKED ON SUBSTRATE.

-READ STANDARDS AND TEST BLANKED ON SAMPLE DILUENT.

FIG.4

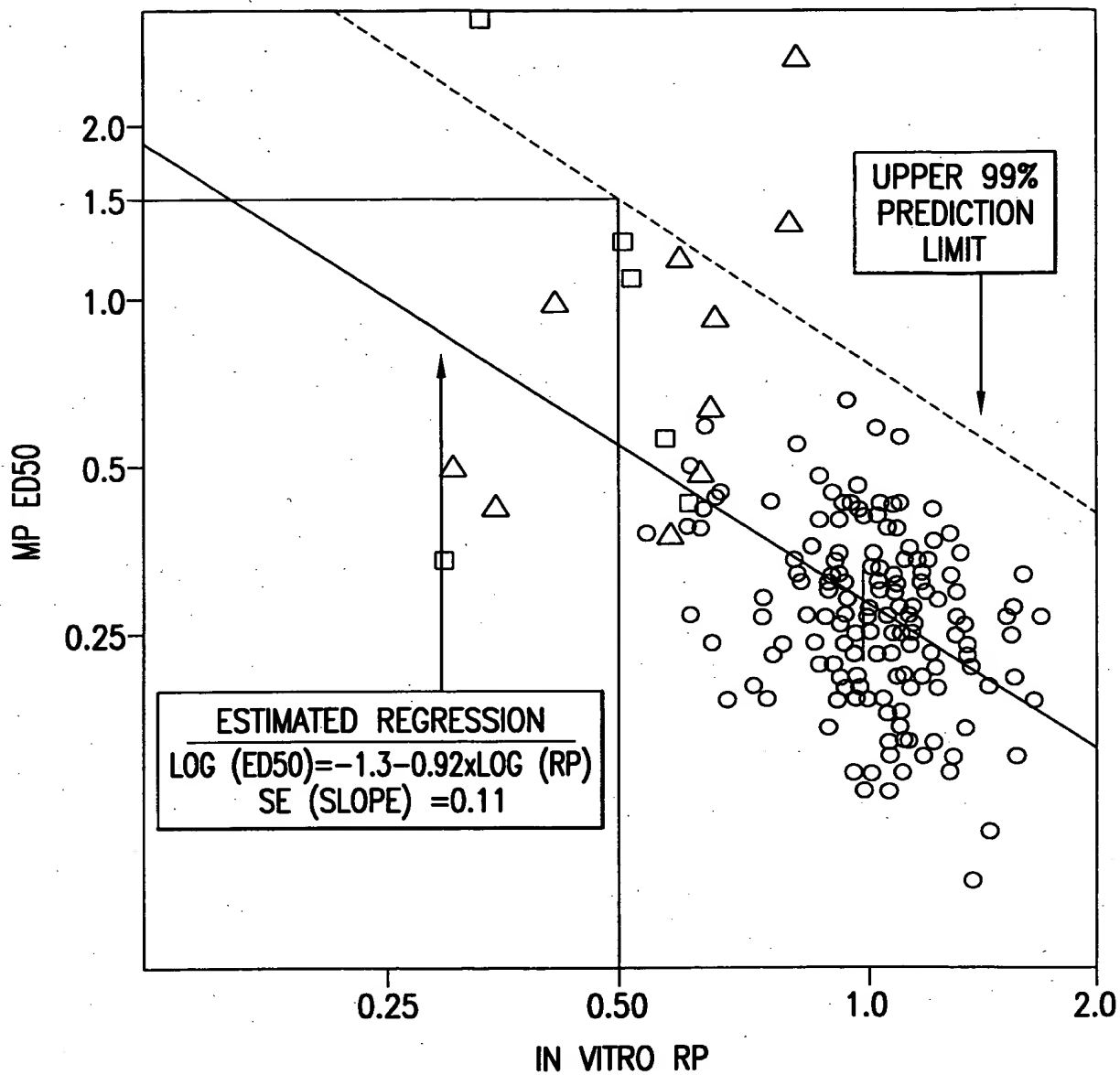


FIG.5

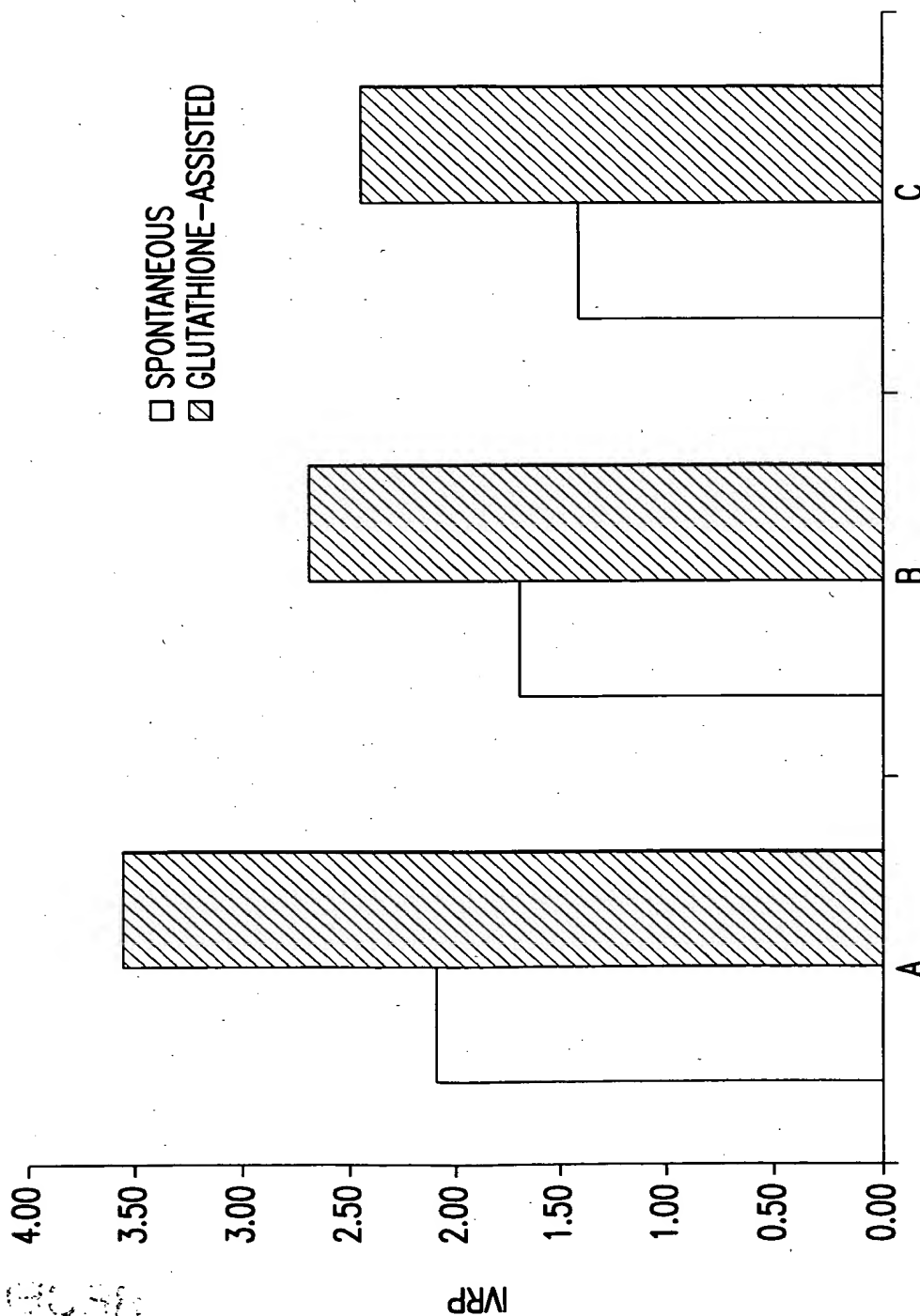


FIG.6

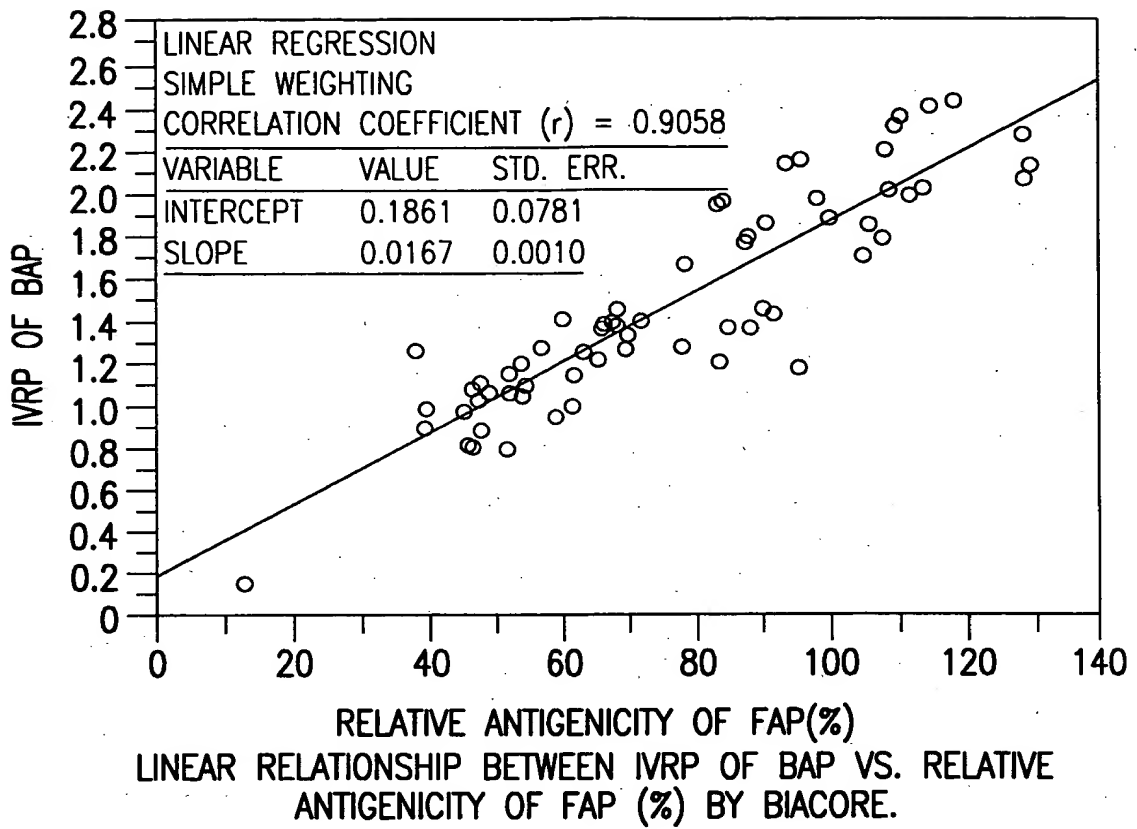


FIG.7

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